Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims

Claim 1 (original). An arrangement for calibrating a Venturi valve, the Venturi valve having a variable shaft position, the Venturi valve operable to provide an air flow corresponding to the variable shaft position, the arrangement comprising:

a source of flow measurements; and

a processing circuit operable to

provide a plurality of voltages to an actuator, the actuator operable to change the variable shaft position dependent on said plurality of voltages,

receive from the source of flow measurements a flow measure for each variable shaft position corresponding to each of the plurality of voltages, and

store information representative of the relationship between each of the plurality of voltages and the flow measures.

Claim 2 (original). The arrangement of claim 1 wherein the processing circuit is further operable to:

provide first plural test voltages to the actuator to determine a first voltage of the plurality of voltages associated with a first measured flow value;

after determining the first voltage, provide second plural test voltages to the actuator to determine a second of the plurality of voltages associated with a second measured flow value;

after determining the second voltage, provide a set of other voltages to the actuator, and obtain a corresponding flow measurement for each of the set of other voltages, the set of other voltages being between the first voltage and the second voltage; and

wherein the plurality of voltages includes the first voltage, the second voltage and the set of other voltages.

Claim 3 (original). The arrangement of claim 1 wherein the processing circuit includes a controller operably coupled to receive a flow set point from an external device, the controller further operable to cause a select output voltage to be provided to the actuator, the select output voltage based at least in part on the flow set point and the stored information.

Claim 4 (original). The arrangement of claim 1 wherein the processing circuit is further operable to store information representative of the relationship between each of the plurality of voltages and the flow measures in the form a table that identifies a correspondence between each of the plurality of voltages and the corresponding flow measure.

Claim 5 (original). The arrangement of claim 1 wherein a voltage difference between a first set of voltages in the plurality of voltages is greater than a voltage difference between a second set of voltages in the plurality of voltages.

Claim 6 (original). The arrangement of claim 1 wherein the processing circuit is further operable to store information representative of the relationship between each of the plurality of voltages and the flow measures by:

obtaining candidate information representative of the relationship;

performing a verification operation on the candidate information;

storing information representative of the relationship between each on the plurality of voltages and the flow measures based on a set of verified candidate information.

Claim 7 (original). The arrangement of claim 1 wherein the processing circuit is further operable to:

determine a first voltage associated with a first flow value,

determine a second voltage associated with a second flow value, and

provide a set of other voltages to the actuator and obtaining a corresponding flow measurement for each of the set of other voltages, the set of other voltages being between the first voltage and the second voltage, and

wherein the plurality of voltages includes the first voltage, the second voltage and the set of other voltages.

Claim 8 (original). The arrangement of claim 7 wherein the processing circuit is further operable to determine a first voltage by:

providing a maximum voltage to the actuator;

obtaining a maximum flow measure corresponding to the maximum voltage;

determining the first flow value as a fractional portion of the maximum flow measure; and

determining the first voltage associated with the first flow value.

Claim 9 (original). The arrangement of claim 7 wherein the second flow value is approximately a rated minimum controllable flow value for the valve.

Claim 10 (original). The arrangement of claim 7 wherein the processing circuit is further operable to provide the set of other voltages by:

providing the set of other voltages in an interleaved sequence, wherein the voltage difference between any two voltages provided in the interleaved sequence exceeds the voltage between any two adjacent voltages in the set of other voltages.

Claim 11 (original). A method of calibrating a Venturi valve, the Venturi valve having a variable shaft position, the Venturi valve operable to provide an air flow corresponding to the variable shaft position, the method comprising:

a) installing the Venturi valve in a facility;

b) after installing the Venturi valve, providing a plurality of voltages to an actuator, the actuator operable to change the variable shaft position dependent on said plurality of voltages,

c) receiving from a source of flow measurements a flow measure for each variable shaft position corresponding to each of the plurality of voltages,

d) storing information representative of the relationship between each of the plurality of voltages and the flow measures; and

e) using the Venturi valve as a part of a system that regulates air flow within the facility.

Claim 12 (original). The method of claim 11 wherein steps b) and c) further comprise:

providing first plural test voltages to the actuator to determine a first voltage of the plurality of voltages associated with a first measured flow value,

providing second plural test voltages to the actuator to determine a second of the plurality of voltages associated with a second measured flow value, and

providing a set of other voltages to the actuator, and obtaining a corresponding flow measurement for each of the set of other voltages, the set of other voltages being between the first voltage and the second voltage, and

wherein the plurality of voltages includes the first voltage, the second voltage and the set of other voltages.

Claim 13 (original). The method of claim 11 further comprising:

receiving a flow set point from an external device; and

employing a controller to cause a select output voltage to be provided to the actuator, the select output voltage based at least in part on the flow set point and the stored information.

Claim 14 (original). The method of claim 11 wherein step d) further comprises storing information representative of the relationship between each of the plurality of voltages and the flow measures in the form a table that identifies a correspondence between each of the plurality of voltages and the corresponding flow measure.

Claim 15 (original). The method of claim 14 wherein a voltage difference between a first set of voltages in the plurality of voltages is greater than a voltage difference between a second set of voltages in the plurality of voltages.

Claim 16 (original). The method of claim 11 wherein step d) further comprises storing information representative of the relationship between each of the plurality of voltages and the flow measures by:

obtaining candidate information representative of the relationship;

performing a verification operation on the candidate information; and

storing information representative of the relationship between each on the plurality of voltages and the flow measures based on a set of verified candidate information.

Claim 17 (currently amended). A method of calibrating a Venturi valve, the Venturi valve having a variable shaft position, the Venturi valve operable to provide an air flow corresponding to the variable shaft position, the method comprising:

a) determining a first actuator voltage associated with a predetermined first flow value;

b) determining a second actuator voltage associated with a predetermined second flow value;

c) providing a set of other voltages to the actuator and obtaining a corresponding flow measurement for each of the set of other voltages, the set of other voltages being between the first actuator voltage and the second actuator voltage; and

d) storing information representative of the relationship between each of a plurality of voltages and the flow measures, the plurality of voltages including the first actuator voltage, the second actuator voltage and the set of other voltages.

Claim 18 (original). The method of claim 17 wherein step a) further comprises:

providing a maximum voltage to the actuator;

obtaining a maximum flow measure corresponding to the maximum voltage;

determining the first flow value as a fractional portion of the maximum flow measure; and

determining the first voltage associated with the first flow value.

Claim 19 (original). The method of claim 17 wherein the second flow value is approximately equal to a rated minimum controllable flow value for the valve.

Claim 20 (original). The method of claim 17 wherein step c) further comprises:

providing the set of other voltages in an interleaved sequence, wherein the voltage difference between any two voltages provided in the interleaved sequence exceeds the voltage between any two adjacent voltages in the set of other voltages.

Claim 21 (original). An arrangement for calibrating a valve, the valve having a variable shaft position, the valve operable to provide a flow corresponding to the variable shaft position, the arrangement comprising:

a source of flow measurements; and

a processing circuit operable to

provide a plurality of voltages to an actuator, the actuator operable to change the variable shaft position dependent on said plurality of voltages,

receive from the source of flow measurements a flow measure for each variable shaft position corresponding to each of the plurality of voltages, and

store information representative of the relationship between each of the plurality of voltages and the flow measures.

Claim 22 (original). The arrangement of claim 21 wherein the processing circuit is further operable to:

provide first plural test voltages to the actuator to determine a first voltage of the plurality of voltages associated with a first measured flow value;

after determining the first voltage, provide second plural test voltages to the actuator to determine a second of the plurality of voltages associated with a second measured flow value;

after determining the second voltage, provide a set of other voltages to the actuator, and obtaining a corresponding flow measurement for each of the set of other voltages, the set of other voltages being between the first voltage and the second voltage; and

wherein the plurality of voltages includes the first voltage, the second voltage and the set of other voltages.

Claim 23 (original). The arrangement of claim 21 wherein the valve is an air flow valve.

Claim 24 (original). The arrangement of claim 23 wherein the valve is a regulated output air flow valve.

Claim 25 (original). The arrangement of claim 21 wherein the processing circuit is further operable to:

determine a first voltage associated with a first flow value,

determine a second voltage associated with a second flow value, and

provide a set of other voltages to the actuator and obtaining a corresponding flow measurement for each of the set of other voltages, the set of other voltages being between the first voltage and the second voltage, and

wherein the plurality of voltages includes the first voltage, the second voltage and the set of other voltages.

Claim 26 (original). The arrangement of claim 25 wherein the processing circuit is further operable to provide the set of other voltages by:

providing the set of other voltages in an interleaved sequence, wherein the voltage difference between any two voltages provided in the interleaved sequence exceeds the voltage between any two adjacent voltages in the set of other voltages.